



Earth and Space

Science
Year 5
Autumn Term

Overview

During this topic, pupils will explore the solar system in which we live and describe the movements of the moon and sun in relation to the Earth. They will gain an understanding of day/night and the role the sun and moon play.



Knowledge & Understanding

In this unit, the pupils will:

- describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Enquiry Skills & Concepts

In this unit, the pupils will be:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions.
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Home – School link project

During this topic pupils can choose to:

- Make a model of the solar system.
- Create a moon diary, mapping the direction and shape of the moon each night.

Topic Vocabulary

axis – an imaginary line through the centre of an object, around which the object turns

equator – the imaginary circle around the earth that divides the earth into the Northern and Southern hemisphere

gravity – the force by which all objects are attracted to each other

orbit – the path an object takes

planet – a large object in space that orbits a star

rotation – the act of turning on or around an axis

solar system – the collection of planets and their moons which orbit the sun

Working Scientifically

accuracy – how close a result comes to the true value

analyse – explore why something happened the way it did

comparative test – a test that compares one event to another and identify different outcomes

data – information collected for a specific purpose

evaluation – examining how your test could be improved / changed in the future

fair test – a test that controls all but one variable when attempting to answer a scientific question

prediction – to use prior knowledge to state the outcome before it has happened

variable – can change and not constant